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| APPLICATION NO.                | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO.     | CONFIRMATION NO. |  |
|--------------------------------|-------------|----------------------|-------------------------|------------------|--|
| 10/022,184                     | 12/14/2001  | Yang-Pioung Kim      | 946,038                 | 1088             |  |
| 7590 07/27/2005                |             |                      | EXAM                    | EXAMINER         |  |
| John S. Egbert                 |             |                      | JACKSON, MONIQUE R      |                  |  |
| Harrison & Egbert<br>7th Floor |             |                      | ART UNIT                | PAPER NUMBER     |  |
| 412 Main Street                |             |                      | 1773                    |                  |  |
| Houston, TX 77002              |             |                      | DATE MAILED: 07/27/2005 |                  |  |

Please find below and/or attached an Office communication concerning this application or proceeding.

|  | Application No.  | Applicant(s)  |  |  |  |
|--|--|---|--|--|--|
|  | 10/022,184   | KIM, YANG-PIOUNG  |  |  |  |
| Office Action Summary  | Examiner   | Art Unit  |  |  |  |
|  | Monique R. Jackson   | 1773  |  |  |  |
| The MAILING DATE of this communication a Period for Reply  |  | the correspondence address  |  |  |  |
| A SHORTENED STATUTORY PERIOD FOR REF THE MAILING DATE OF THIS COMMUNICATION  - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication.  - If the period for reply specified above is less than thirty (30) days, a r  - If NO period for reply is specified above, the maximum statutory perion  - Failure to reply within the set or extended period for reply will, by state that the period for reply will be stated by the Office later than three months after the may be available under the provisions of 37 CFR 1.704(b). | N. 1.136(a). In no event, however, may a repeply within the statutory minimum of thirty of will apply and will expire SIX (6) MONTI ute, cause the application to become ABA | oly be timely filed  (30) days will be considered timely.  HS from the mailing date of this communication.  NDONED (35 U.S.C. § 133). |  |  |  |
| Status   |  |   |  |  |  |
| 1) Responsive to communication(s) filed on 01  | July 2005.   |   |  |  |  |
| 2a) This action is <b>FINAL</b> . 2b) This action is non-final.  |  |   |  |  |  |
| 3) Since this application is in condition for allowance except for formal matters, prosecution as to the ments is  |  |   |  |  |  |
| closed in accordance with the practice under Ex parte Quayle, 1935 C.D. 11, 453 O.G. 213.  |  |   |  |  |  |
| Disposition of Claims  |  |   |  |  |  |
| 4)⊠ Claim(s) 11 and 12 is/are pending in the application.  |  |   |  |  |  |
| 4a) Of the above claim(s) is/are withdrawn from consideration.   |  |   |  |  |  |
| 5) Claim(s) is/are allowed.  |  |   |  |  |  |
| 6)⊠ Claim(s) <u>11 and 12</u> is/are rejected.   |  |   |  |  |  |
| 7) Claim(s) is/are objected to.  |  |   |  |  |  |
| 8) Claim(s) are subject to restriction and   | I/or election requirement.   |   |  |  |  |
| Application Papers   |  |   |  |  |  |
| _  |  |   |  |  |  |
| 9) The specification is objected to by the Examiner.   |  |   |  |  |  |
| 10) The drawing(s) filed on is/are: a) accepted or b) objected to by the Examiner.   |  |   |  |  |  |
| Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  |  |   |  |  |  |
| Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).  11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.   |  |   |  |  |  |
| ine oath or declaration is objected to by the  | Examiner. Note the attached  | Office Action or form PTO-152.  |  |  |  |
| Priority under 35 U.S.C. § 119   |  |   |  |  |  |
| 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).  |  |   |  |  |  |
| a)⊠ All b)□ Some * c)□ None of:  |  |   |  |  |  |
| 1. Certified copies of the priority documents have been received.  |  |   |  |  |  |
| 2. Certified copies of the priority documents have been received in Application No   |  |   |  |  |  |
| 3. Copies of the certified copies of the priority documents have been received in this National Stage  |  |   |  |  |  |
| application from the International Bure  | ,  |   |  |  |  |
| * See the attached detailed Office action for a li   | ist of the certified copies not re   | eceived.  |  |  |  |
|  |  |   |  |  |  |
| Attachment(s)  |  |   |  |  |  |
| 1) Notice of References Cited (PTO-892)  |  | mmary (PTO-413)   |  |  |  |
| 2) Notice of Draftsperson's Patent Drawing Review (PTO-948)  | Paper No(s)/   | Mail Date   |  |  |  |
| 3) Information Disclosure Statement(s) (PTO-1449 or PTO/SB/0 Paper No(s)/Mail Date   | (8) 5) ☐ Notice of Info<br>6) ☐ Other:   | ormal Patent Application (PTO-152)  |  |  |  |
| U.S. Patent and Trademark Office   | Action Summary   | Part of Paper No./Mail Date 07252005  |  |  |  |

## **DETAILED ACTION**

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 7/1/05 has been entered. Claims 11-12 are pending in the application.

## Claim Rejections - 35 USC § 103

2. Claims 11 and 12 are rejected under 35 U.S.C. 103(a) as being unpatentable over Hein, III et al (USPN 5,542,529) alone or in view of Whyzmuzis et al (USPN 5,523,335) or Murphy (USPN 4,483,712) or Miyamoto et al (USPN 5,656,701) for the reasons recited in the prior office action and restated below.

Hein et al teach a high barrier packaging material comprising a core of aluminum metallized polyethylene terephthalate, an ink layer on the metallized and/or unmetallized side of the PET core and outer transparent heat seal layers which are preferably polyesters such as PET, wherein the ink layer may be formed on both sides of the metallized PET core, the entire surface of which may be covered by transparent or opaque (*i.e.* "light protecting") inks of various colors (Abstract; Col. 5, lines 1-7; Col. 7, line 19-Col. 8, line 19; Col. 8, lines 30-47.) Hence, Hein et al teach the following packaging structure: transparent PET heat seal/opaque ink layer/metallized PET/opaque ink layer/transparent PET heat seal with no other layers therebetween which is equivalent to the instantly claimed structure of transparent PET/adhesive layer/aluminum metallized PET/ink layer/hot melt layer wherein one of the opaque ink layers reads upon the

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colored adhesive layer directly applied to the aluminum-deposited PET film and the two outer transparent PET heat seal layers read upon the transparent PET layer overlaying the adhesive layer and the hot melt layer on the ink layer of the instantly claimed invention. Though Hein et al teach that a yellow ink layer can be printed on the entire surface of the metallized PET core or other colors may be utilized with various inks listed in the examples, Hein et al do not specifically teach the use of white ink layers over the entire surface. However considering Hein et al teach that various colored opaque inks may be utilized, one skilled in the art at the time of the invention would have been motivated to utilize white ink layers, an obvious species of colored opaque ink, in the invention taught by Hein et al wherein a white ink layer over the entire surface of the metallized PET would function as an adhesive layer between the metallized PET and the outer transparent PET heat seal and hence reads upon the broad limitation "adhesive". Further, though Hein et al do not specifically teach that the ink compositions are "two-component" adhesives of white color as instantly claimed, the Examiner takes the position that a white opaque ink layer would read upon the instantly claimed "two-component adhesive of white color" considering the ink layer would be formulated from a binder material (first component) and a pigment (second component), in this case, a white pigment. Alternatively, it would have been obvious to one having ordinary skill in the art to utilize any conventional laminating ink composition wherein two-part or two-component laminating inks are known to provide excellent adhesion and printing on plastic films such as PET films as taught by Whyzmuzis et al or Murphy or Miyamoto et al, wherein the two-component laminating adhesives may comprise pigments of various colors including white pigments.

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## Response to Arguments

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Applicant's arguments filed 7/1/05 have been fully considered but they are not 3. persuasive. The Applicant first argues that the ink layer taught by Hein does not read upon the instantly claimed adhesive layer. However, the Examiner respectfully disagrees considering the instant claims are interpreted in their broadest sense in the art and considering the ink layer is in between the metallized PET core and the outer transparent PET heat seal layer and hence adheres the outer transparent PET to the metallized PET core, especially when the ink layer is over the entire surface of the metallized PET core as taught by Hein. Though the Applicant argues that one skilled in the art would not equate the ink layer of Hein to an adhesive layer as instantly claimed, the Examiner notes that the instant claims and the instant specification fails to provide any definition of the term "adhesive" that clearly differentiate the adhesive layer of instant invention from the intermediate ink layer taught by Hein and further, the art clearly recognizes the use of laminating inks to produce an ink layer that also functions as an adhesive layer as taught by the secondary references. The Applicant further argues that the invention taught by Hein does not includes other inventive elements of the instant invention, namely the transparent layer 100 and the white adhesive layer on the other side of the metal-deposited layer 102. However, as more clearly depicted in the discussion above, the layers taught by Hein do in fact read upon all of the layers of the instant invention wherein an outer transparent PET heat seal layer would read upon the transparent layer of the instant invention and the intermediate ink layer would read upon the adhesive layer. Hence, the Examiner maintains her position that the instant invention is obvious over the invention taught by Hein.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Monique R. Jackson whose telephone number is 571-272-1508. The examiner can normally be reached on Mondays-Thursdays, 8:00AM-4:30PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Carol Chaney can be reached on 571-272-1284. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Monique R. Jackson

Primary Examiner

Technology Center 1700

July 25, 2005